

# Groundwater Cleanup and Your Community PASADENA TREATMENT FACILITY PLANS

We recognize that being a good neighbor includes sharing information that will help you to better understand NASA's groundwater cleanup project at the Jet Propulsion Laboratory (JPL). NASA is committed to keeping our neighbors informed and involved, especially as we plan for a cleanup activity that is proposed to take place in your community.

### A New Pasadena Groundwater Treatment Plant

Under an agreement with the City of Pasadena, NASA would pay for a new water treatment plant to be built by the City on vacant property in the Windsor Reservoir area (see map). Groundwater extracted from four drinking water wells owned by the City would be treated to remove volatile organic compounds (VOCs) and perchlorate – chemicals that originated from waste disposal practices at the Jet Propulsion Laboratory many decades ago. In addition to paying for the design, construction and operation of the plant, NASA would provide technical support to the City of Pasadena, who would be responsible for operating the treatment plant.

The new plant would treat up to 7,000 gallons of water per minute. It would allow NASA to clean up groundwater in the Monk Hill Subarea, which is a

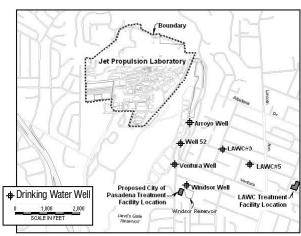
# How It Works Removing VOCs

In the liquid-phase granular activated carbon process, very porous carbon particles attract and accumulate unwanted volatile organic compounds that are in the water. The carbon beads are later disposed of at a licensed off-site facility.

## **Removing Perchlorate**

Ion exchange technology runs groundwater through tanks filled with tiny resin, or plastic, beads. When the unwanted perchlorate in the groundwater touches the beads, perchlorate is exchanged with chloride in the resin, and the perchlorate is extracted from the water.

portion of the larger Raymond Basin aquifer, far sooner than if we tried to remove all the chemicals by building another treatment plant on site at JPL. The new plant would use technology similar to the treatment facility NASA funded for the Lincoln Avenue Water Company in Altadena, which has been successfully operating since July 2004.



A new treatment plant for groundwater extracted from four closed drinking water wells – Windsor Well, Well 52, Arroyo Well, and Ventura Well – would be located southeast of JPL on vacant City property next to the Windsor Reservoir.

# **Next Steps**

When will construction start? What will traffic be like during construction? What will the facility look like? These are some of the many details still to be worked out. For example, NASA would assist the City in its application for a local building permit.





The permitting approval processes, some having public comment periods, also provide opportunities for sharing your views on the treatment plant under consideration in your community such as:

- ➤A City of Pasadena Conditional Use Permit authorizing that the proposed land use and activities are compatible and consistent with those of the particular zoning district.
- ► California Environmental Quality Act (CEQA) compliance requiring the City to identify significant environmental effects and avoid or mitigate those impacts, if feasible.
- ► California Department of Health Services permit allowing the system to supply drinking water after treatment.

# **Progress to Date**

In 2006, NASA published a document referred to as a Proposed Plan that described NASA's preferred alternative for cleaning up chemicals in groundwater to the east and southeast of the Jet Propulsion Laboratory. That plan included funding the proposed new groundwater treatment plant for the City of Pasadena and continued funding the Lincoln Avenue Water Company facility that has been operating (with NASA funding) since July of 2004. The Proposed Plan explains how this proposed treatment would work, what other options were considered, and the reasons why NASA found this to be the best method for cleaning up groundwater in the Monk Hill Subarea.

You can read the Proposed Plan at the local information repositories listed below, and on our Web site at http://jplwater.nasa.gov. NASA received comments from the public on this Proposed Plan during the public comment period (April 19 to July 7, 2006). NASA is preparing a document called a Record of Decision (ROD) supporting the decision to move forward with the new treatment plant. The ROD will include a summary of the comments received and how those comments affected the decision that was reached. The final ROD is expected to be completed by Spring 2007.

We'll continue sharing information about groundwater cleanup in your community as we learn more along the way. If you have questions, please email, write or call (addresses and numbers are listed below).

#### For more information contact

**Merrilee Fellows** 

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Para más información en español llame a

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#### **Information Repositories**

La Cañada Flintridge Public Library 4545 Oakwood Ave., La Cañada Flintridge, California 91011 (818) 790-3330

Pasadena Central Library 285 E. Walnut St., Pasadena, California 91101 (626) 744-4052

Altadena Public Library 600 E. Mariposa St., Altadena, California 91001 (626) 798-0833

JPL Library, Bldg. 111 (JPL Personnel Only) (818) 354-4200